

Unit 7 Test - Form A

45

Slope

Find the slope given the following information. (8 points)

$(1, -19)$ $(-2, -7)$

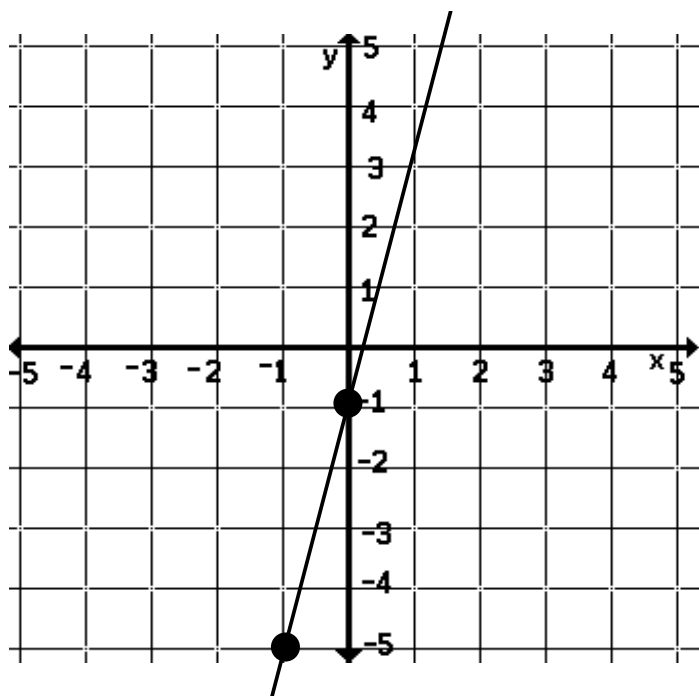
$(9, 3)$ $(19, -17)$

x	y
2	6
4	9
6	12

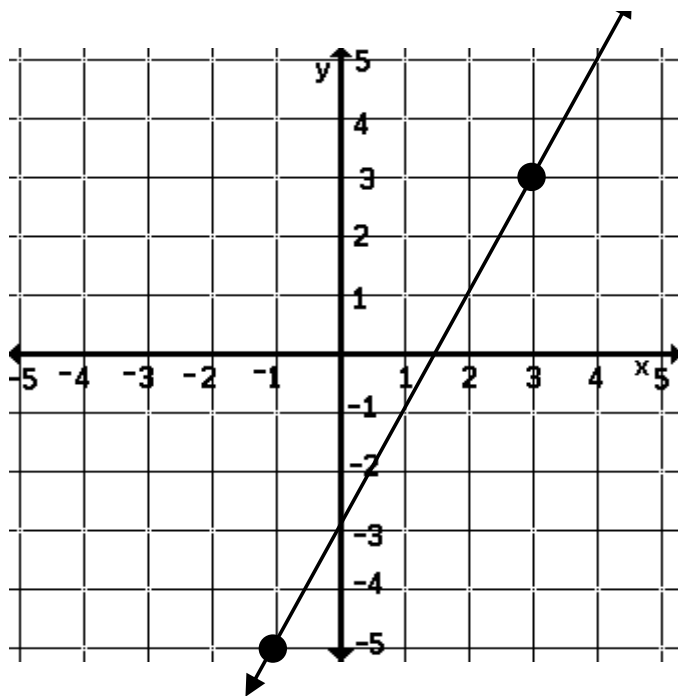
$m =$ _____

x	y
1	5
2	10
3	15

$m =$ _____



$m =$ _____

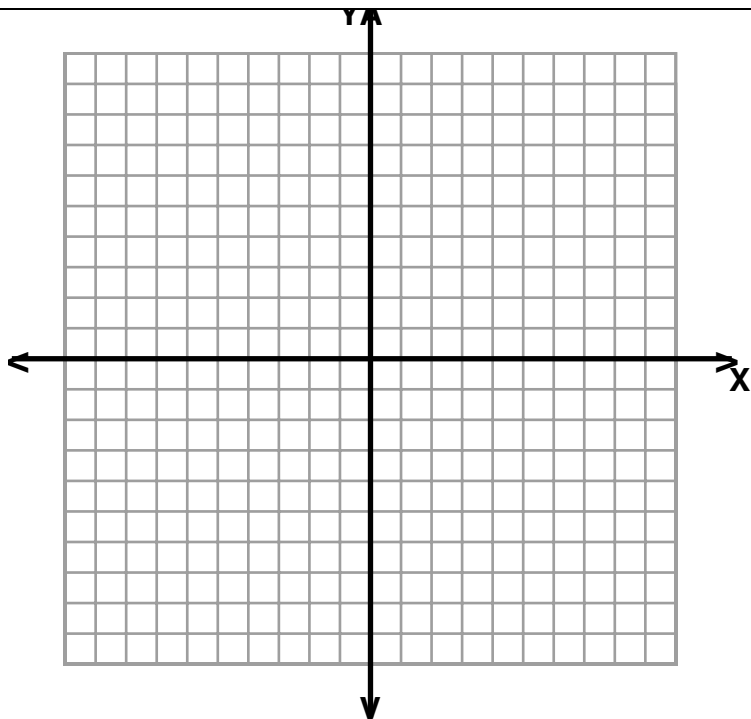


$m =$ _____

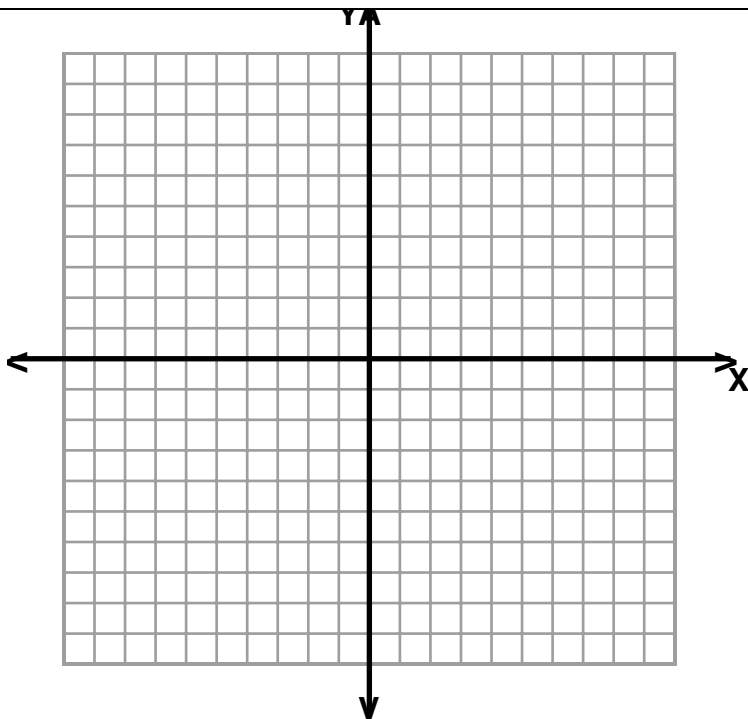
Slope-Intercept Form

Write an equation for each in slope-intercept form. Then, graph your equation. (4 points)

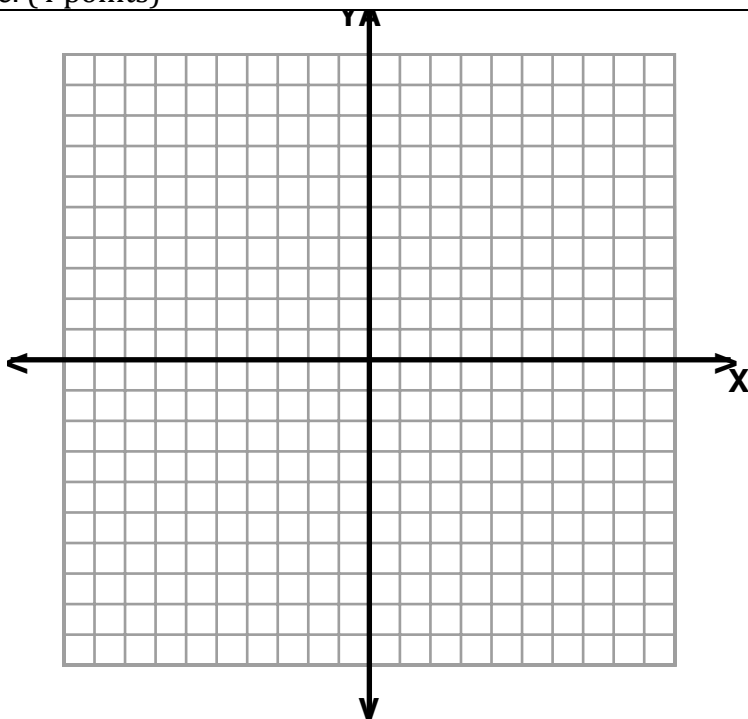
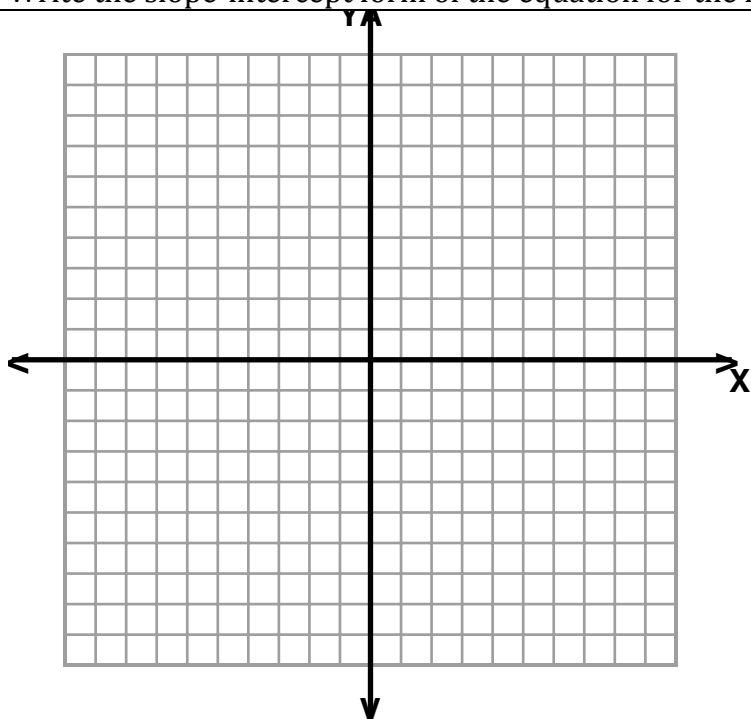
$$m = 2, b = -4$$

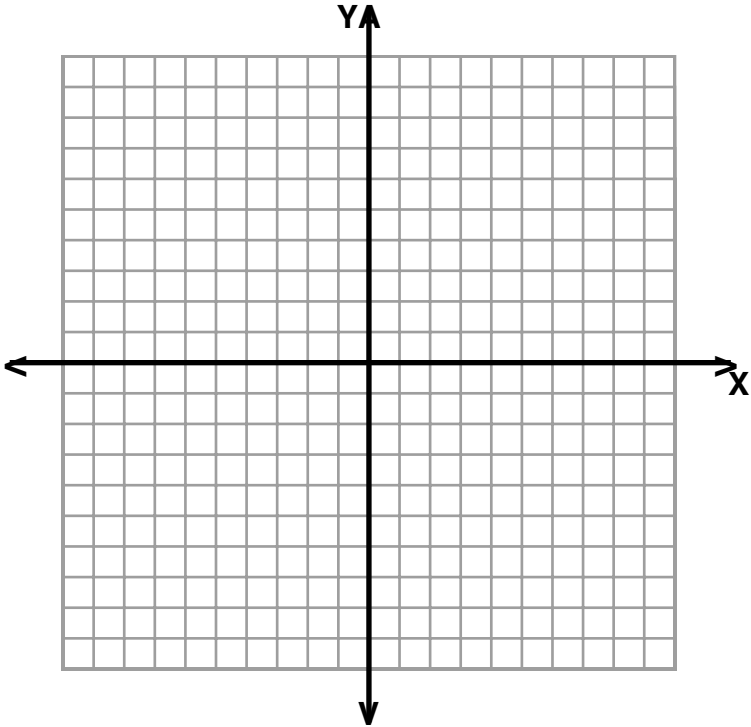
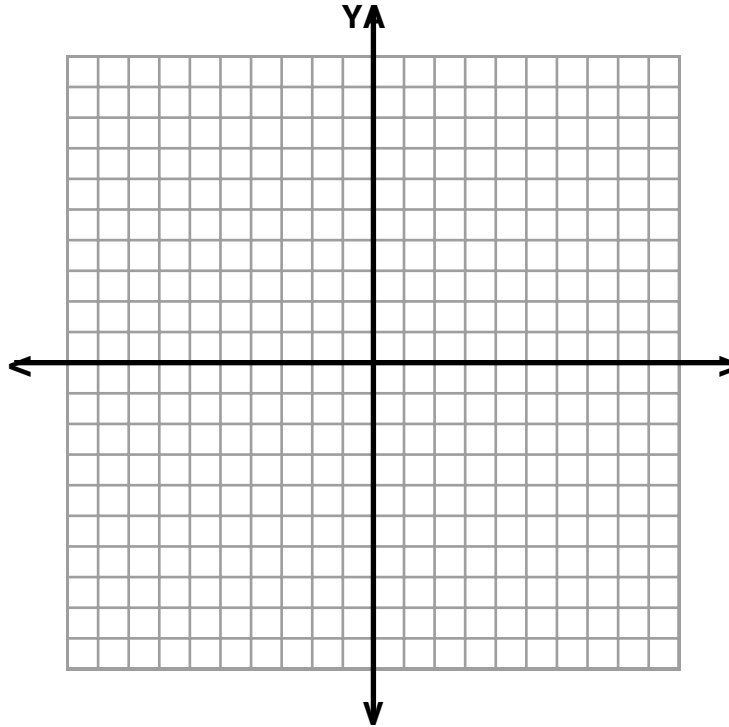


$$m = 4/5, b = -1$$



Write the slope-intercept form of the equation for the line. (4 points)



Standard Form	
Find the x - and y-intercepts. Then graph each equation using the intercepts. (6 points)	
$x + 2y = 8$	$3x - y = 9$
x-intercept:_____ y-intercept:_____	x-intercept:_____ y-intercept:_____
	

Write each equation in standard form using only integers. (2 points)	
$y = 2x - 6$	$y = \frac{1}{3}x - 3$

Parallel and Perpendicular Lines	
Identify which lines are parallel. (1 point)	
a. $y = \frac{5}{3}x$	b. $y = -5x + 2$ c. $y = 5x + 4$ d. $y = -5x - 1$

Identify which lines are perpendicular. (1 point)

a. $y = 2x + 1$

b. $y = -3x$

c. $y = -3x - 2$

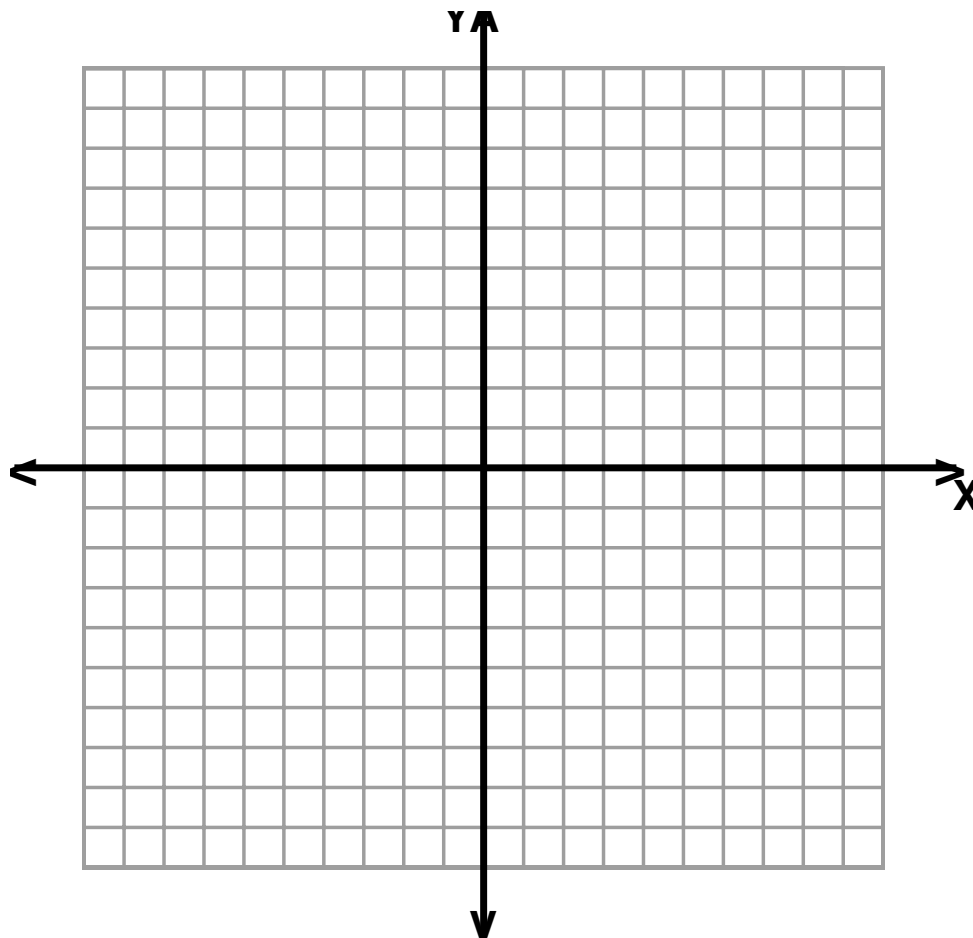
d. $y = -\frac{1}{2}x$

Given the equation $y = 2x + 3$. Answer the following questions. (2 points each)

Write an equation that is parallel to $y = 2x + 3$.

Write an equation that is perpendicular to $y = 2x + 3$.

Graph your two equations with $y = 2x + 3$. Be sure to label each line!



Graph each equation. Then describe the shape that has been made as a result. (3 points)

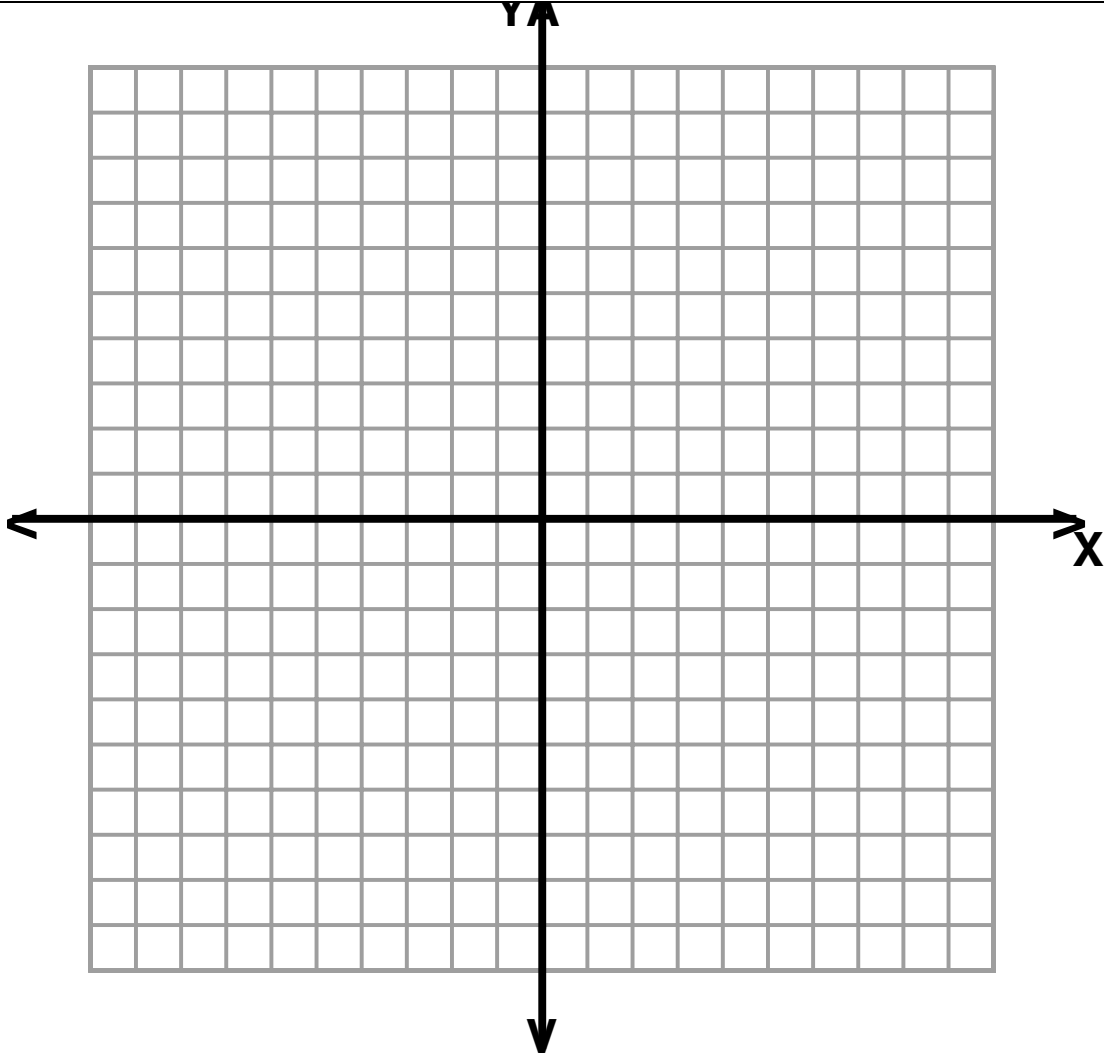
$x = 2$

$y = 3$

$y = 7$

$x = 8$

Shape:

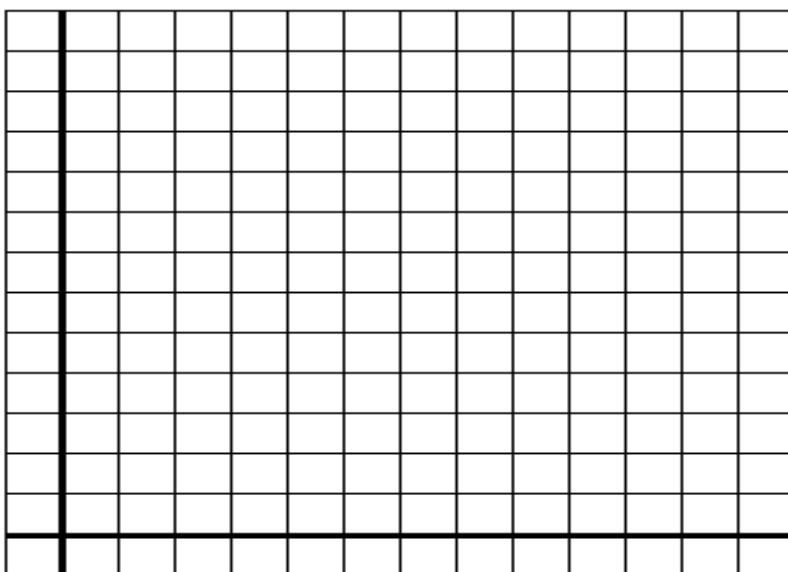


Word Problems (5 points each)

Situation: A video rental store charges a \$20 membership fee and \$2.50 for each video rented. Write a linear function to describe the situation. Then graph your function.

Let ____ = _____ Let ____ = _____

Equation:



Situation: The store at which Andy usually shop is having a sale. Roast beef costs \$4 per pound and shrimp costs \$10 per pound. Andy has \$96 to spend

a. Write an equation in standard form to represent this equation.

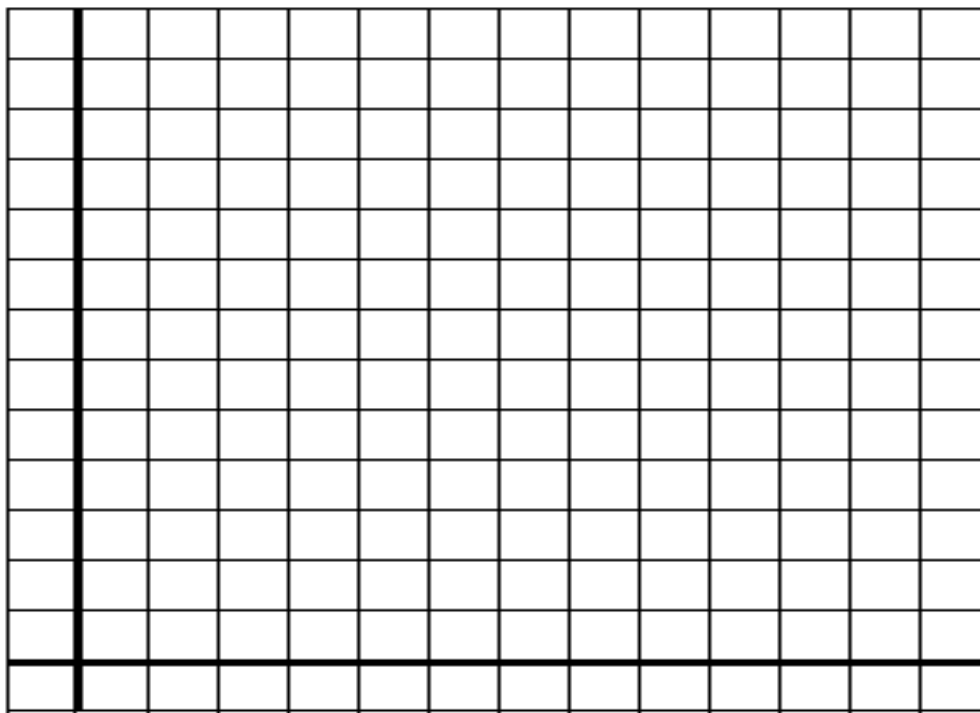
Equation: _____

b. Find the x and y-intercepts.

x-intercept: _____

y-intercept: _____

c. Graph the equation using the x and y-intercepts.



d. Use your graph to determine one possible combination of roast beef and shrimp.

Math Honor Code: Please copy this statement below, then sign your name.
My signature certifies that this is my work. I did not give or receive help on it.

X _____

